

International Workshop on Flow-Induced Blood Damage in Rotating Systems

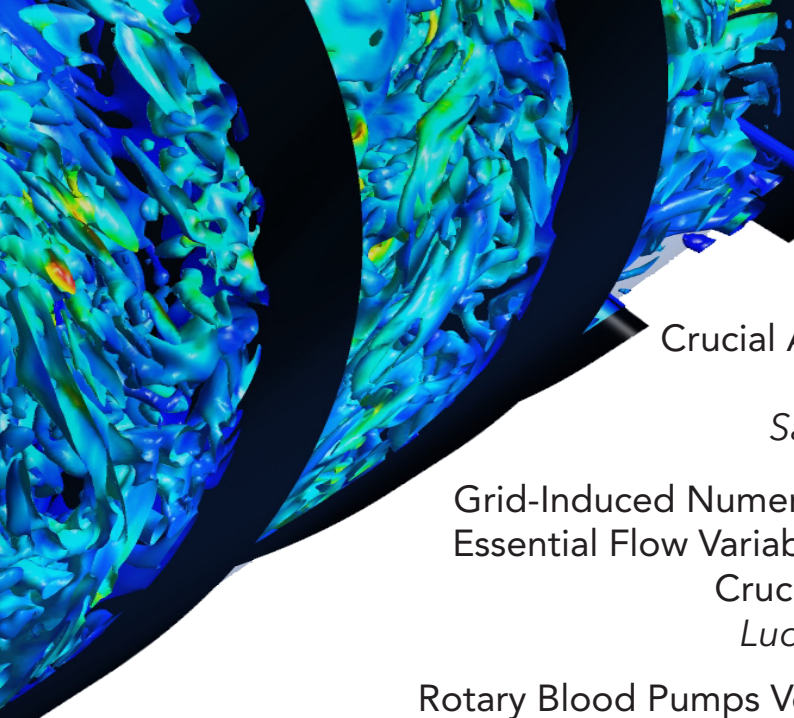
August 29-30

Rostock, Germany

Program

Thursday 29th

- 12.00 Lunch
- 12.30 Welcome
Frank-Hendrik Wurm, University of Rostock
- 12.45 Normal Fluid Stresses in Rotary Ventricular Assist Devices
Katharine Fraser, University of Bath
- 13.30 Influence of Turbulent Shear Stresses on the Numerical Blood Damage
Prediction in a Ventricular Assist Device
Benjamin Torner, University of Rostock
- 14.15 Analytic Model for Shear-Dependent Adhesion of Blood Platelets
Jamel Khamassi, Industrial Science GmbH
- 15.00 Coffee Break
- 15.15 Strain-Based Hemolysis Modeling and its Significance for the Design of
Rotary Blood Pumps
Lutz Pauli, RWTH Aachen
- 16.00 Blood Trauma Potential of the HVAD Pump in Pediatric Use
Marcus Granegger, Charité Berlin
- 16.45 Experimental and Numerical Analysis of the Primary-Secondary Flow
Transition of Whole Blood Analogues in a Rotational Rheometer
Nathaniel Kelly, University of Bath
- 18.00 BBQ and Sport Activities at the Beach



Friday 30th

Crucial Aspects for Shear Stress Quantification in Rotary Blood Pumps <i>Sascha Groß-Hardt, RWTH Aachen</i>	09.00
Grid-Induced Numerical Errors for Shear Stresses and Essential Flow Variables in a Ventricular Assist Device: Crucial for Blood Damage Prediction? <i>Lucas Konnigk, University of Rostock</i>	09.45
Rotary Blood Pumps Versus Displacement Blood Pumps <i>Michael Lommel, Charité Berlin</i>	10.30
Coffee Break	11.15
Numerical Prediction of High Shear Rate Thrombus Sites in VADs <i>N. N., Charité Berlin</i>	11.30
Comparative Analysis of the Thrombogenic Potential of the Heartware HVAD and Heartmate 3 Cardiac Pumps: A „Numerical Rationale“ of Clinical Outcomes <i>Andrea Boraschi, University of Zurich</i>	12.15
Lunch	13.00
Mechanical Blood Trauma During Assisted Circulation: Clinical Impact and Outlook <i>Anthony Alozie, Clinic of Cardiac Surgery University of Rostock</i>	13.45
Low-Flow Assessment of Current ECMO/ECCO2R Rotary Blood Pumps and the Impact on Hemocompatibility <i>Sascha Groß-Hardt, RWTH Aachen</i>	14.30
Comparison of Blood Damage Investigations in VADs: Current Successes, Suggestions and Challenges <i>Adrian Wisniewski, Berlin Heart GmbH</i>	15.15
Discussion and Future Perspectives <i>Workshop</i>	16.00
Closing	16.30

Venue: WIROtel Mittelmole, Am Bahnhof 3a, 18119 Rostock-Warnemünde
www.bdw2019.org

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